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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,507	01/09/2006	Christoph Nemmaier	P05,0069	9934
26574	7590	02/14/2008		
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			EXAMINER DONABED, NINOS J	
			ART UNIT 2143	PAPER NUMBER
			MAIL DATE 02/14/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,507

Applicant(s)

NEMMAIER ET AL.

Examiner

NINOS DONABED

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-42, 44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-42, 44 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/10/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/10/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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Response to Amendment

1. This action responsive to Amendment filed on 12/19/2007. Claims 23, 30, 33, 34, 35, 38, 41, 44, and 45 are amended. Claim 43 is cancelled. Claims 23-42, 44, and 45 are pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 30, the phrase "setting parameter" is unclear. It is not understood what "a setting parameter is or encompasses, and hence "a value of the data object specifies a value of the setting parameter" is unclear. For the furthering of prosecution, the Examiner will take the "setting parameter" as meaning any attribute in the data object.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 23-36, 38, 42, 44, and 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard et al., (United States Patent No. 6,920,506) in view of Weiner (United States Patent Application Publication Number 2004/0008378) .

Regarding claim 23,

Barnard teaches a method for control of a printer or copier, comprising the steps of: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

Barnard further teaches transferring data for the printer or copier between at least one first control unit and a second control unit for the printer or copier via at least one data line; **(See Figure 9 and Column 7 Line 67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)**

Barnard further teaches associating a first identifier with the first control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address of the computer)**

Barnard further teaches associating a second identifier with the second control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address of the network management device)**

Barnard further teaches the first, second, and third identifiers comprising network addresses. **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

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Barnard does not explicitly teach storing at least one data object comprising a variable or a constant for control of the printer or copier in a storage region of the second control unit.

Barnard does not explicitly teach associating a third identifier with the data object.

Weiner teaches storing at least one data object comprising a variable or a constant for control of the printer or copier in a storage region of the second control unit; and **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

Weiner further teaches associating a third identifier with the data object. **(See paragraphs [0004] – [0011], an identifier is associated with a data object.)**

It would have been obvious to one of ordinary skill in the art to combine Weiner with Barnard because both deal with printing and management of print applications and data. According to Weiner the advantages of using a data object are to display a requested print page, to continue printing at a particular point on a page. Also when an error occurs at the printer, the data object can be utilized to continue the printing at the position where the error occurred. **(See paragraphs [0005] – [0006])**

Regarding claim 24,

Barnard in view of Weiner teaches method according to claim 23 wherein the network addresses are hierarchically organized and the third network address is hierarchically subordinate to the second network address. **(See Column 11 Line 50**

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through Column 12 Line 12, Barnard discloses a routing table, which is hierarchically organized and the third network address is hierarchically subordinate to the second network address)

Regarding claim 25,

Barnard in view of Weiner teaches a method according to claim 23 wherein the second network address is determined with aid of the third network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a router and routing table. The print job is sent to the router and then to a network printer meaning the second network address is determined with aid of the third network address)**

Regarding claim 26,

Barnard in view of Weiner teaches a method according to claim 24 wherein a transfer path is predetermined by a hierarchical position of the third network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard teaches a router and routing table. The router predetermines the transfer path based on the third network address, a printer.)**

Weiner teaches for access to the data object. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that the data of a data object would be used in the print job because it commonly carries information regarding the style information of the document to be printed.

Regarding claim 27,

Barnard in view of Weiner teaches a method according to claim 23 wherein content is read out from the storage region of the second control unit by the first control unit with aid of the third network address. **(See Figure 2 and Claims 48 and 65, Barnard teaches a printer queue which stores the print jobs in the network management device which are read out by the computer with the aid of the printer network address.)**

Weiner teaches the data of a data object. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that the data of a data object would be used in the print job because it commonly carries information regarding the style information of the document to be printed. The print jobs along with the data object are read out by the computer with the aid of the printer network address

Regarding claim 28,

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Barnard in view of Weiner teaches a method according to claim 23 wherein the first control unit and the second control unit respectively form a network node. **(See figures 1 and 9, Barnard discloses a computer connected to a network management device, these devices are a network node)**

Regarding claim 29,

Barnard in view of Weiner teaches a method according to claim 25,

Barnard further teaches that a range of MAC addresses could be used for a plurality of network printers. **(See Column 12 Lines 13-42, Barnard teaches a range of MAC addresses for network printers)**

Barnard further teaches that a routing table is used. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a routing table)**

Barnard does not explicitly teach that the third network address comprises a sub-address of the second network address.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to ensure that the third network address comprises a sub-address of the second network address because subdividing the address into sub-addresses keeps the network organized.

Regarding claim 30 as best understood,

Barnard in view of Weiner teaches a method according to claim 23 wherein the data object comprises a setting parameter and a value of the data object specifies a

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value of the setting parameter. **(See paragraphs [0004] – [0012], Weiner teaches a data object that can contain image data and film data.)**

Regarding claim 31,

Barnard in view of Weiner teaches a method according to claim 23 wherein the control units are hierarchically organized, the second control unit being hierarchically subordinate to the first control unit, and the network address of the second control unit being hierarchically subordinate to the network address of the first control unit. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a routing table. Information in a routing table is hierarchically organized. Since data is being passed from the first control unit to the second control unit, the second network address is hierarchically subordinate to the first control unit)**

Regarding claim 32,

Barnard in view of Weiner teaches a method according to claim 23 wherein at least one third control unit is provided that is connected with the second control unit via a second data line and is hierarchically subordinate to the second control unit, **(See Column 4 Lines 1-31, Barnard discloses that a MAC address for a network printer is obtained from the server)**

Weiner teaches the data object being read out by the third control unit via the second data line. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that the data of a data object would be used in the print job because it commonly carries information regarding the style information of the document to be printed.

Regarding claim 33, as best understood,

Barnard in view of Weiner teaches the method according to Claim 23.

Barnard fails to explicitly teach that a CAN bus connection, a LAN connection, a data line according to a V.24 standard, and a data line according to a SDLC standard can be used for the data connection.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use, a CAN bus connection, a LAN connection, a data line according to a V.24 standard, and a data line according to a SDLC standard because they are functionally equivalent and substitutable.

Regarding claim 34,

Barnard in view of Weiner teaches a method according to claim 23 wherein the transfer over the first data line occurs with aid of the Simple Network Management Protocol. **(See Figure 9 and Column 11 Line 51 through Column 13 Line 12, Barnard discloses Simple Network Management Protocol)**

Regarding claim 35,

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Barnard in view of Weiner teaches the method according to Claim 23.

Barnard further teaches that a router is used. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a router)**

Barnard fails to explicitly teach that the routers are provided in the control units, the routers forwarding a read request to at least one network address hierarchically subordinate to the data object.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the router in the control unit because decreasing the number of parts in a system will cut cost. Also, one of ordinary skill in the art at the time the invention was made would have known to use the router to determine the proper path of a read request because this function is efficiently carried out by a router over a network.

Regarding claim 36,

Barnard in view of Weiner teaches a method according to claim 23 wherein a position in the network is determined with aid of the network address of the data object. **(See Column 2 Lines 25-60, Barnard discloses an IP address for the printer, which gives the location on the network of the print job)**

Weiner teaches the data object. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that the data of a data object would be used in the print job because it commonly carries information regarding the style information of the document to be printed.

Regarding claim 38,

Barnard in view of Weiner discloses a method according to claim 23 wherein the first control unit is connected with the fourth control unit via a third data line, **(See Figure 9 and See Column 11 Lines 16 through Column 12 Line 12, Barnard discloses print jobs being transferred from a DHCP server to a printer)**

the fourth control unit being subordinate to the first control unit and has access to the data object with the aid of the first control unit. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer) and (See Figure 9 and See Column 11 Lines 16 through Column 12 Line 12, Barnard discloses a routing table. Information in a routing table is hierarchically organized)**

Regarding claim 42,

Barnard in view of Weiner teaches a method according to claim 23 wherein the first control unit comprises a base node of the network. **(See Column 13 Lines 10-47, Barnard discloses a network management device that allows access to the network)**

Regarding claim 44,

Barnard teaches a device to control a printer or copier, comprising: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

Barnard further teaches at least one first control unit for the printer or copier with which is associated a first identifier; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the computer)**

Barnard further teaches at least one second control unit for the printer or copier with which is associated a second identifier; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the network management device)**

Barnard further teaches at least one data line via which data is transferred between the first control unit and the second control unit; **(See Figure 9 and Column 7 Line 67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)**

Barnard further teaches the first, second, and third identifiers comprising network addresses. **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

Barnard does not explicitly teach the second control unit has a storage region in which at least one data object comprising a variable or a constant for control of the printer or copier is storable.

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Barnard does not explicitly teach associating a third identifier with the data object.

Weiner teaches storing at least one data object comprising a variable or a constant for control of the printer or copier in the second control unit; and **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

Weiner further teaches associating a third identifier with the data object. **(See paragraphs [0004] – [0011], an identifier is associated with a data object.)**

It would have been obvious to one of ordinary skill in the art to combine Weiner with Barnard because both deal with printing and management of print applications and data. According to Weiner the advantages of using a data object are to display a requested print page, to continue printing at a particular point on a page. Also when an error occurs at the printer, the data object can be utilized to continue the printing at the position where the error occurred.

Regarding claim 45,

Barnard teaches a method for control of a device which places indicia on a medium, comprising the steps of: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

Barnard further teaches transferring data between a first control unit and a second control unit for said device via a data line; **(See Figure 9 and Column 7 Line**

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67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)

Barnard further teaches associating a first identifier with the first control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address of the computer)**

Barnard further teaches associating a second identifier with the second control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address of the network management device)**

Barnard further teaches the first, second, and third identifiers comprising network addresses. **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

Barnard does not explicitly teach storing at least one data object comprising a variable or a constant for control of said device the second control unit.

Barnard does not explicitly teach associating a third identifier with the data object.

Weiner teaches storing at least one data object comprising a variable or a constant for control of the printer or copier in the second control unit; and **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

Weiner further teaches associating a third identifier with the data object. **(See paragraphs [0004] – [0011], an identifier is associated with a data object.)**

It would have been obvious to one of ordinary skill in the art to combine Weiner with Barnard because both deal with printing and management of print applications and data. According to Weiner the advantages of using a data object are to display a requested print page, to continue printing at a particular point on a page. Also when an error occurs at the printer, the data object can be utilized to continue the printing at the position where the error occurred.

6. Claims 37, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard in view of Weiner further in view of Nomura (**United States Patent Number 6,115,392**).

Regarding claim 37, as best understood,

Barnard in view of Weiner teaches the method according to claim 32.

Barnard fails to explicitly teach that commands transferred by a fourth control unit according to a first data transmission standard are translated by the first control unit into commands of a second data transmission standard, and the data transferred to the first control unit by the second control unit according to the second data transmission standard are translated by the first control unit into data according to the first data transmission standard.

Nomura teaches a first data transmission standard are translated by the first control unit into commands of a second data transmission standard, and the data

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transferred to the first control unit by the second control unit according to the second data transmission standard are translated by the first control unit into data according to the first data transmission standard. **(See, Column 2 Line 51 – Column 3 Line 65, Nomura teaches converting data of a first transmission standard into data of a second transmission standard and vice versa)**

It would have been obvious to a person of ordinary skill in the art at the time the invention was made combine Barnard and Nomura because different devices may apply different data transmission standards. In order for these devices to be able to communicate with other devices, which apply different data transmission standards, it would be necessary to translate between the different standards.

Regarding claim 39,

Barnard in view of Weiner further in view of Nomura teaches the method according to claim 37.

Barnard fails to explicitly teach that the first, second and third control units are arranged in the printer or copier, and the fourth control unit is arranged outside of the printer or copier and is connected with the printer or copier over a third data line.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to arrange the first, second and third control units in the printer or copier for the benefit of making an integral system, which is cost efficient. It would have also been obvious to a person of ordinary skill in the art at the time the invention was made to arrange the fourth control unit outside of the printer or copier,

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which is connected with the printer or copier over a third data line to make the system separable and easier to replace if the device fails.

Regarding claim 41, Barnard in view of Weiner further in view of Nomura teaches a method according to claim 37 wherein the fourth control unit comprises a personal computer with software. **(See Column 2 Lines 36-59, Barnard teaches software for use in the network administrator)**

7. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard in view of Weiner in view of Nomura further in view of Morisaki et al. **(United States Patent Publication Number 2003/0053104)**, herein referred to as Morisaki.

Regarding claim 40,

Barnard in view Weiner further in view of Nomura teaches the method according to claim 37,

Barnard in view Weiner further in view of Nomura fails to teach the third data line is designed according to a V.24 standard, and the printer or copier is connected with the fourth control unit for maintenance and setting jobs

Weiner teaches the data of the data object. **(See paragraphs [0022] – [0029], Weiner teaches a data object being identified by a control variable which controls the printer.)**

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Morisaki teaches a maintenance and setting tool for use with a printer. **(See Paragraphs [0055] - [0057])**

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the V.24 standard to design the third data line because it would have been a well known standard used for data connection which is easily applied. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barnard in view of Nomura with Morisaki in order to increase the longevity of the printer or copier. Finally, it would have been obvious to one skilled in the art at the time the invention was made to use a forth control unit for maintenance and setting because it makes the system separable and easier to replace malfunctioning parts.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any response to this Office Action should be **faxed** to (571) 272-8300 or **mailed** to:

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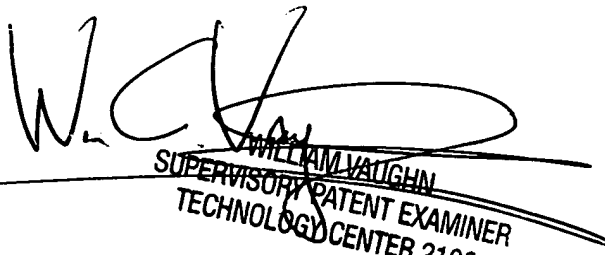
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NINOS DONABED whose telephone number is (571)270-3526. The examiner can normally be reached on Monday-Friday, 7:30 AM-5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ninos Donabed
1/30/2008


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